

JOINT MANEUVER AND FIRES COORDINATION BOARD: DOES THE JOINT
TARGETING COORDINATION BOARD NEED TO EVOLVE?

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE
General Studies

by

DAVID S. NAISBITT, MAJ, USAF
MMAS, American Military University, Manassas, VA, 1997

Fort Leavenworth, Kansas
2003

Approved for public release; distribution is unlimited.

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports (0704-0188), 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.					
1. REPORT DATE (DD-MM-YYYY) 06-06-2003		2. REPORT TYPE thesis		3. DATES COVERED (FROM - TO) 05-08-2002 to 06-06-2003	
4. TITLE AND SUBTITLE JOINT MANEUVER AND FIRES COORDINATION BOARD DOES THE JOINT TARGETING COORDINATION BOARD NEED TO EVOLVE? Unclassified				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S) Naisbitt, David, S				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME AND ADDRESS US Army Command and General Staff College 1 Reynolds Ave Fort Leavenworth, KS66027-1352				8. PERFORMING ORGANIZATION REPORT NUMBER ATZL-SWD-GD	
9. SPONSORING/MONITORING AGENCY NAME AND ADDRESS ,				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT A1,Administrative or Operational Use 06-06-2003 US Army Command and General Staff College 1 Reynolds Ave Fort Leavenworth, KS66027-2314					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT Joint and service doctrines stress the importance of closely integrating maneuver and fires as complementary operations to maximize their synergistic effect. Joint doctrine provides for joint planning and liaisons to ensure total effectiveness of the joint force. However, if there is a breakdown in the joint planning or liaison efforts, this can create potential seams or sanctuaries the enemy can exploit. The Joint Targeting Coordination Board (JTCB) provides an oversight mechanism for the joint force commander (JFC) to potentially catch any planning and liaison breakdowns or disconnects, but, doctrinally, the JTCB focuses primarily only upon fires. Joint doctrine does not provide the JFC with an oversight mechanism for both maneuver and fires. Specifically, the JTCB, as described in JP 3-60, Joint Doctrine for Targeting, does not go far enough in providing the JFC the appropriate level of oversight to minimize potential seams and sanctuaries, while keeping the forces responsive to unanticipated actions. The creation of a Joint Maneuver and Fires Coordination Board would help ensure the integration and synchronization of maneuvers and fires within joint operations. Operations Desert Storm and Anaconda provide studies where a JMFCB might have improved integration by catching disconnects earlier in the planning and execution process.					
15. SUBJECT TERMS Fire coordination; Maneuver; Joint planning; Joint operations; Joint Targeting Coordination Board (JTCB); Targeting; Doctrine					
16. SECURITY CLASSIFICATION OF:		17. LIMITATION OF ABSTRACT Same as Report (SAR)		18. NUMBER OF PAGES 69	
19. NAME OF RESPONSIBLE PERSON Buker, Kathy kathy.buker@us.army.mil					
a. REPORT Unclassified	b. ABSTRACT Unclassified	c. THIS PAGE Unclassified	19b. TELEPHONE NUMBER International Area Code Area Code Telephone Number 9137583138 DSN 5853138		
					Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std Z39.18

MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of Candidate: Major David S. Naisbitt

Thesis Title: Joint Maneuver and Fires Coordination Board: Does the Joint Targeting Coordination Board Need to Evolve?

Approved by:

_____, Thesis Committee Chair
Major Matthew T. Phillips, M.B.A.

_____, Member
David H. Gray, Ph.D.

_____, Member
Lieutenant Colonel John N. Duquette, B.A.

Accepted this 6th day of June 2003 by:

_____, Director, Graduate Degree Programs
Philip J. Brookes, Ph.D.

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

JOINT MANEUVER AND FIRES COORDINATION BOARD: DOES THE JOINT TARGETING COORDINATION BOARD NEED TO EVOLVE?, by Major David S. Naisbitt, 69 pages.

Joint and service doctrines stress the importance of closely integrating maneuver and fires as complementary operations to maximize their synergistic effect. Joint doctrine provides for joint planning and liaisons to ensure total effectiveness of the joint force. However, if there is a breakdown in the joint planning or liaison efforts, this can create potential seams or sanctuaries the enemy can exploit. The Joint Targeting Coordination Board (JTCB) provides an oversight mechanism for the joint force commander (JFC) to potentially catch any planning and liaison breakdowns or disconnects, but, doctrinally, the JTCB focuses primarily only upon fires. Joint doctrine does not provide the JFC with an oversight mechanism for both maneuver and fires. Specifically, the JTCB, as described in JP 3-60, *Joint Doctrine for Targeting*, does not go far enough in providing the JFC the appropriate level of oversight to minimize potential seams and sanctuaries, while keeping the forces responsive to unanticipated actions. The creation of a Joint Maneuver and Fires Coordination Board would help ensure the integration and synchronization of maneuvers and fires within joint operations. Operations Desert Storm and Anaconda provide studies where a JMFCB might have improved integration by catching disconnects earlier in the planning and execution process.

TABLE OF CONTENTS

	Page
THESIS APPROVAL PAGE	ii
ABSTRACT	iii
ACRONYMS	v
CHAPTER	
1. INTRODUCTION	1
2. LITERATURE REVIEW	12
3. METHODOLOGY	28
4. ANALYSIS	32
5. CONCLUSIONS AND RECOMMENDATIONS	50
REFERENCE LIST	57
INITIAL DISTRIBUTION LIST	62
CERTIFICATION FOR MMAS DISTRIBUTION STATEMENT.....	63

ACRONYMS

AFDD	Air Force Doctrine Document
AO	Area of Operations
BCD	Battlefield Coordination Detachment
CAS	Close Air Support
FAS	Feasibility, Acceptability, Suitability
FM	Field Manual
FSCL	Fire Support Coordination Line
JCB	Joint Coordination Board
JFACC	Joint Force Air Component Commander
JFC	Joint Force Commander
JFLCC	Joint Force Land Component Commander
JMFCB	Joint Maneuver Fires Coordination Board
JP	Joint Publication
JTCB	Joint Targeting Coordination Board
JTF	Joint Task Force
JWC	Joint Warfighting Center
TRADOC	US Army Training and Doctrine Command
TWG	Tactical-level and Operational-level War Game

CHAPTER 1

INTRODUCTION

Introduction and Primary Question

There is still a tendency in each separate unit . . . to be a one-handed puncher. By that I mean that the rifleman wants to shoot, the tankier to charge, the artilleryman to fire. . . . To get harmony in battle, each weapon must support each other. Team play wins. (JP 1, *Joint Warfare of the Armed Forces of the United States* 2000, V-1)

General George S. Patton Jr.

The joint force commander (JFC) must ensure that the deployed military forces do not act as one-handed punchers but as an integrated team acting together to defeat the enemy. Joint doctrine provides the framework for the JFC to integrate and synchronize the assets under his or her command. It is essential for the JFC to have planning, liaison, and oversight mechanisms in place in order to conduct the campaign and achieve theater objectives. Breakdowns in planning, liaison, or unexpected events can lead to the inadvertent creation of enemy sanctuaries or seams within friendly lines that the enemy can exploit. Such breakdowns can be checked by oversight systems. The joint publications allow for similar, but limited, mechanisms, specifically the Joint Targeting Coordination Board (JTCB) described in Joint Publication (JP) 3-60, *Joint Doctrine for Targeting*. The primary research question of this thesis is, does the JTCB, as described in JP 3-60, go far enough in orchestrating fires and maneuvers at the operational level to ensure integration and proper weight of effort of components to achieve the JFC's objectives?

Secondary Questions

The primary question raises several follow-on questions: Why is it important to orchestrate fires and maneuver? What is the current function and organization of the JTCB? What planning and liaison capabilities currently exist in doctrine? What oversight mechanisms do joint publications give the JFC? What are Army and Air Force doctrinal positions on integration, synchronization, planning, liaison, and oversight? Would the JFC benefit from an oversight mechanism that focused on both fires and maneuver? Could the JTCB evolve into a Joint Maneuver and Fires Coordination Board (JMFCB)? What would the functions and organization of the JMFCB be? What current joint and service doctrines support or contradict such an idea?

Background

How does the military integrate airpower as a maneuver force? In the past, planners used airpower for strategic attacks, interdiction, and close air support, but recent technological improvements enable airpower to become a true maneuver force, as recognized in the latest joint publications. This is significant because, as *Army Vision 2010* predicts, “Most future operations will occur on the lower and middle portions of the continuum of military operations.” (n.d., 6) Large, linear battlefields with conventional forces squaring off against each other may be a thing of the past. The US Army is thus transforming by employing a lighter, more rapidly deployable force. At the same time, technological advancements in weaponry have made airpower more effective and precise. Since the Army will be deploying a lighter force and airpower is a maneuver force with precise fires, the need to integrate airpower as a maneuver force will become increasingly important.

Moreover, improved command, control, and communications combined with global positioning system guided weapons deployed on a greater variety of aircraft, give airpower the ability to hit multiple targets quickly, accurately, and simultaneously.

Military historian B. H. Liddell Hart said of airpower, well before technological improvements made airpower more deadly and responsive:

Air forces can be switched from one objective to another. They are not committed to any one course of action as an army is, by its bulk, complexity, and relative low mobility. While their quick action should be concentrated, it can be quickly concentrated afresh against other objectives, not only in a different place, but of a different kind. (Charlton 2002, 87)

Therefore, at times, airpower may provide the preponderance of fire and maneuver capabilities available to the JFC in a theater. How will the JFC integrate this newest maneuver force into the overall scheme of battle? The current oversight methods of the JFC may not be sufficient to ensure proper integration of air and land maneuver units. Joint doctrine gives a great deal of latitude to the JFC for the conduct of operations within the theater. The challenge is to identify how to integrate and coordinate the joint assets in the optimum manner. According to JP 3-0, *Doctrine for Joint Operations*, the JFC must:

Employ various maneuver and movement control and fire support coordination measures to facilitate effective joint operations. These measures include boundaries, phase lines, objectives, coordinating altitudes to deconflict air operations, air defense areas, amphibious objective areas, submarine operating patrol areas, and minefields. (2001a, III-41)

A line on the map to keep maneuver forces apart may not be the best way to achieve synergy in a joint environment. It also may inadvertently create seams and sanctuaries that the enemy can exploit. Air Force Doctrine Document 2 (AFDD 2), *Organization and Employment of Aerospace Power* asserts that, “Aerospace maneuver

forces operate across the theater or joint operations area and are not restricted to geographic areas of operation as is typical with surface maneuver forces” (2000, 5). Now maneuver forces have a greater degree of overlapping areas of operations (AOs) requiring an equally higher degree of coordination between the components.

The challenge is similar to a combined air defense system that can employ a missile engagement zone, fighter engagement zone, or a joint engagement zone. In a missile engagement zone, friendly fighters stay clear because missile systems will engage all aircraft entering the zone. In a fighter engagement zone, only fighters will engage targets. A joint engagement zone, where either missile systems or fighters can engage targets, is the most effective method of defending an area but it requires significant integration, coordination, and oversight to prevent fratricide. Due to the challenging integration and oversight nature of a joint engagement zone, air defense systems usually do not employ joint engagement zones, despite possessing the greatest defensive potential. The main point is that neither air defense artillery nor aircraft is owned by the same service, yet each can operate in the other’s area of responsibility.

Like the joint engagement zone challenge, the JFC faces the dilemma of how to best blend the air and land maneuver units in a joint environment. The answer may be that the current joint planning and oversight systems are the best ways to use available resources. On the other hand, perhaps the JTCB should evolve into something approaching a JMFCB. The JMFCB could conceivably provide oversight for both air and ground maneuver and fire operations, but not be limited, like the JTCB, to oversight of just fires, the preponderance of which airpower provides. In any case, the JFC requires an oversight process to utilize all available resources to maximum advantage.

The requirement for operational oversight and coordination is not an abstract issue for an academic exercise. According to Carl Pivarsky's paper, *Airpower in the Context of a Dysfunctional Joint Doctrine*, the Iraqi Republican Guard troops escaped total destruction during Operation Desert Storm's ground attack despite an abundance of airpower available simply because, "The required control mechanisms were not in place to allow that to happen. As a result of these missing mechanisms, the result was that the air component could not hit the Republican Guard at the optimum time--that is, when it was repositioning" (1997, 18). At issue was integration of air and land power engaged with enemy troops to achieve the effect. There was not an adequate system in place to allow the forces to work together, or allow the JFC the oversight to ensure that near-term plans for air and land forces components matched his or her planned weighted effort. Thus, lack of integration limited the synergistic effect of the US military forces. AFDD 1, *Air Force Basic Doctrine*, states "it is the precise, coordinated application of the various elements of air, space, and surface forces which brings disproportionate pressure on the enemy leaders to comply with our national will" (1997, 24). Is the US military postured to integrate the maneuver units of all the services and provide the JFC the tools needed to oversee the operation?

The current system for integrating joint targeting may lend a solution or at least point out areas upon which to build. The JTCB, according to JP 3-60, is an assembly "formed by the joint force commander to accomplish broad targeting oversight functions that may include but are not limited to coordinating targeting information, providing targeting guidance and priorities, and refining the joint integrated prioritized target list" (2002, GL-7). Some airmen charge that the board merely validates the joint integrated

prioritized target list to ensure that airpower is applied in accordance with the JFC's intent, as opposed to truly trying to integrate the joint war effort. This joint integrated prioritized target list may be best at hitting prioritized targets, but it can lack synergy because of potential inefficient integration, purpose, and timing of all forces involved. Simply destroying a target may not be what the commander wants. As the military drives towards effects-based operations, coordination and integration become even more vital. Coordination and integration require a joint system blending air and ground maneuver and fires to ensure that the effects for the commander's intention are achieved. The process needs to be more formalized than lines on a map dividing surface areas to deconflict ground maneuver forces.

Assumptions

Though it may not always be the case, this thesis assumes that the JFC's staff will be fully manned and the commander will assign both a joint force land component commander (JFLCC) and a joint force air component commander (JFACC) to execute the land and air portions of the battle. The JFC will examine the size and complexity of the operation and the forces available before deciding to assign JFLCC and JFACC duties, but this thesis maintains the best approach is to have a full staff in place even if there are no units for a particular component to command. For instance, this thesis maintains, the JFC should have assigned a JFLCC during Operation Allied Force, the air campaign in support of Kosovo in 1999, despite the presidential direction not to involve US ground forces in fighting the war. The JFLCC could have provided the JFC and JFACC with specific experience and expertise needed to prosecute the air war. Additionally, there

were ground forces in the region that would eventually enter the AO as warfighters, peace makers, or peace keepers. A JFLCC would have helped coordinate their actions.

Airpower is a maneuver force, not just a moveable force. Nothing in the definition of maneuver implies physically holding ground, which airpower cannot accomplish. Airlifting personnel and equipment qualify as movement, but flying combat aircraft to a positional advantage over enemy forces to employ weapons constitutes a maneuver force by definition. While the latest joint publications, specifically JP 3-0, have modified the definition of a maneuver force to include air forces, not all publications include this new definition. Thus there may be some contradictions in the governing regulations and publications. Army Field Manuals (FM), for example, recognize only surface units as maneuver forces.

Definitions

Terminology in the joint environment is vital and this thesis relies on JP 1-02's *Department of Defense Dictionary of Military and Associated Terms*, definitions of key terms. The following terms require highlighting or clarification:

Feasibility, Acceptability, and Suitability (FAS) Test: Feasibility, acceptability, suitability, distinguishable and complete are the five aspects of the traditional FAS Test described in JP 5.0. This thesis will not address distinguishable or complete because they do not apply to the model used.

Integration: "The arrangement of military forces and their actions to create a force that operates by engaging as a whole" (JP 1-02 2001, 216).

Joint Maneuver and Fires Coordination Board: A proposed group formed by the JFC to accomplish operational oversight functions for maneuver and fires forces of the

different components engaged in the JFC's theater. The board should be comprised of representatives from the joint force staff and all components, and chaired by the JFC, or deputy JFC.

Liaison: "That contact or intercommunication maintained between elements of military forces or other agencies to ensure mutual understanding and unity of purpose and action" (JP 1-02 2001, 252).

Maneuver: "1) A movement to place ships, aircraft, or land forces in a position of advantage over the enemy; 2) Employment of forces in the battlespace through movement in combination with fires to achieve a position of advantage in respect to the enemy in order to accomplish the mission" (JP 1-02 2001, 261).

Sanctuary: "An area near or contiguous to the combat area that is exempt from attack and therefore serves as a refuge for staging, logistic, or other activities of enemy combatant powers" (JP 1-02 2001, 383).

Limitations

Joint publications are often in update and there are potential conflicts in comparing some of the more recent publications with earlier versions, such as using definitions of maneuver forces. Airpower as a maneuver force has been expounded by airmen for years, but is just now being recognized in joint publications. Research and published material on whether or not airpower should be considered a maneuver force exists, but is limited to how best to incorporate this capability into joint planning. The historical examples of airpower as a maneuver force better demonstrate that airpower can be a maneuver force, rather than how they were or were not integrated with other maneuver forces. This thesis will use Operations Desert Storm and Anaconda as case

studies for the integration of airpower with land forces. Operation Desert Storm is better documented than the recent Operation Anaconda, but both can illustrate joint planning strengths and weaknesses and serve as a basis for a historical analysis of the issue.

Delimitations

First and foremost, this thesis is an academic study of joint operational oversight tools doctrinally available to the JFC. The issues of how to improve joint planning and liaison activities are beyond the scope of this study. Additionally, this study uses the notion of airpower as a maneuver force to highlight the need for oversight and does not attempt to examine the best techniques for integration airpower as a maneuver force.

This thesis will concentrate on air and land maneuver forces and not on sea forces, other than sea-based airpower. The preponderance of issues comes from the Air Force and Army integration efforts for joint operations; thus these efforts will be the main focus of the thesis. The focus of this thesis centers on oversight mechanisms available to the JFC, not on operational or tactical application of the joint forces. Doctrinal procedures and operational application often differ. The challenge, therefore, is to examine both doctrine and current procedures to determine how oversight is actually accomplished, but the recommendations will strictly focus on doctrine.

This thesis will remain at the unclassified level, which may limit some discussion and research on recent military operations.

Significance of the Study

The importance of identifying potential breakdowns in joint planning and liaison is of critical importance to avoid potential seams or sanctuaries that enemy forces can exploit. Future battlefields will likely be non-linear and non-contiguous, demanding an

even greater requirement for integration of maneuver and fires. The importance of identifying how best to incorporate the newest maneuver force into planning is also critical since future conflicts will likely be limited and airpower will undoubtedly continue to play an increasingly important role in such operations. Surface forces coordinate and integrate their schemes of maneuver between different surface units, but airpower operates across all areas of operations and ordinarily does not “own” a piece of the map. With the exception of capturing airfields or assisting in suppression of enemy air defenses, land forces do not normally conduct maneuver operations to support air forces’ schemes of maneuver. However, as US military forces rapidly deploy throughout the world, airpower will often present the preponderance of fires in a theater, at least initially. It would seem logical that there should be better integration of fires and maneuver. As Army Transformation becomes a reality, it will be even more critical to tie together the limited air and land forces in theater.

The JFC requires a new system to orchestrate these forces under his or her control, and this study may give the joint staff a basis for that effort. Highlighting this need early will, hopefully, institutionalize these policies and doctrine. Identifying the procedures will also help identify any technological shortcomings the military must overcome prior to implementing the new joint planning and oversight procedures.

Summary

This thesis will examine JFC oversight mechanism for the conduct of joint operations using the notion of integrating airpower as a maneuver force. After a review of research and published works associated with the subject and discussing the methodology for analyzing the data, this work will provide a detailed review of current joint doctrine.

As part of the review, the thesis will address a historical analysis of two recent operations, Desert Storm and Anaconda, focusing on the conflicts between joint and service doctrines (past and current) and how operations were actually planned, including what oversight means were, and are, available to the operational commander. The issue could be that mechanisms actually are in place to provide proper oversight of the integration of airpower as a maneuver force, but enforcement is lacking to insure that integration occurs at the appropriate level and time. Lastly, this author will make recommendations for potential changes to the current system.

CHAPTER 2

LITERATURE REVIEW

Introduction

It is difficult to view the contributions of air, land, sea, space, and special operations forces in isolation. Each may be critical to the success of the joint force, and each has certain unique capabilities that cannot be duplicated by other types of forces. Given the appropriate circumstances, any dimension of combat power can be dominant--and even decisive--in certain aspects of an operation or phase of a campaign, and each force can support or be supported by other forces. (2001a, III-10)

JP 3-0, US Department of Defense

The JFC faces the challenge of integrating and synchronizing the available combat power into operations against any adversary. Each service shares the JFC's combat goal of defeating the enemy. However, because of the nature of the services, each has a different perspective on how best to conduct military operations. These differing views can lead to misunderstandings and unintentional planning and liaison lapses that can affect the entire joint operation. To this end, joint doctrine "offers a common perspective from which to plan and operate, and fundamentally shapes the way [US military personnel] think about and train for war" (JP 12000, vi).

Joint doctrine can greatly improve interoperability, but there are still many obstacles the JFC must overcome for a successful and efficient joint campaign. To better understand the challenges the JFC faces, this chapter: 1. explores current joint and service doctrine with respect to oversight for joint operations, 2. provides background on the development of the JTCB, and 3. examines current oversight practices and those developing for joint operations.

Current Doctrine

Service Doctrine

Air Force and Army service doctrine dictate integration of forces differently, so it is important that the JFC has an oversight mechanism to ensure that the component commanders apply proper weight of effort to achieve the JFC's objectives for both the near and long term of the military conflict. As JP 1 states:

Component commanders are first expected to orchestrate the activity of their own forces, branches, and warfare communities. In addition, they must understand how their own capabilities best integrate into the overall design to most effectively satisfy the JFC's intent. Component commanders are also the primary sources of advice to the JFC and fellow component commanders on the requirements for support from, and their capabilities for support to, other component commanders. (2000, V-9)

After the components provide the JFCs advice, the "JFCs set priorities, provide clear targeting guidance, and determine the weight of effort to be provided to various operations" (JP 3-56.1 1994, IV, 6-7). For instance, the Air Force and Army have different views as to the most effective method for employing airpower in military operations. In light of the importance of limited air assets, AFDD 1 states that, "Only theater-level commanders of land and naval components can effectively prioritize their individual air component support requirements to the joint force commander, and only then can effective priorities for the use of air and space forces flow from an informed dialogue between the JFC and the air component commander" (AFDD 1 1997, 26). In other words, components submit airpower requests to the JFC, and then the JFACC and JFC discuss and adjudicate these requests in context of the overall concept of operations.

On the other hand, FM 1, *The Army*, perceives airpower from a different point of view.

The Air Force gains and maintains control of the air. It projects aerial combat power to provide air support and air interdiction for ground force commanders. The Air Force also provides strategic, operational, and tactical airlift support and other functions . . . to support ground operations. (FM 1 2001, 19)

In terms of the Army perspective, the ground war should be the focus of all activity and airpower should focus on shaping the battlefield for the Army.

From just these two differing perspectives, conflicting philosophies arise regarding force employment. There are more areas of contention between the services that this thesis will not address as it is sufficient to demonstrate this fundamental difference of opinion. While the Army feels the Air Force should conduct operations to shape the battlefield for the inevitable ground war, the Air Force believes that a well-orchestrated air campaign may prevent a ground war from ever occurring. Thus, while each component shares the same end goal, the desired means achieve this endstate differs. This is why the JFC requires an oversight capability to ensure the proper weight of effort in accordance with the command guidance and directives.

Joint Doctrine

Joint doctrine charges the JFC with conducting military operations with joint forces. “The overarching operational concept in JP 1, *Joint Warfare of the Armed Forces of the United States*, is that JFCs integrate and synchronize the actions of air, land, sea, space, and special operations forces to achieve strategic and operational objectives through integrated, joint campaigns and major operations” (JP 3-0 2001a, II-4). The question becomes, how does the JFC integrates and synchronizes the components’ actions? According to JP 3-0, “The goal is to increase the total effectiveness of the joint force, not necessarily to involve all forces or to involve all forces equally” (2001a, x). It

further states, “Synchronizing and/or integrating interdiction and maneuver (air, land, and sea) provides one of the most dynamic concepts available to the joint force. Interdiction and maneuver should not be considered separate operations against a common enemy, but rather complementary operations designed to achieve the JFC’s campaign objectives” (JP 3-0 2001a, IV-13).

Thus, the governing doctrine for the conduct of joint operations considers maneuver and interdiction as complimentary operations and dictates that the JFC direct the operational integration of forces to achieve the strategic and operational objectives. Interdiction is defined in the same publication as, “An action to divert, disrupt, delay, or destroy the enemy’s surface military potential before it can be used effectively against friendly forces” (JP 3-0 2001a, GL-10). Air interdiction is defined as, “Air operations conducted to destroy, neutralize, or delay the enemy’s military potential before it can be brought to bear effectively against friendly forces at such distance from friendly forces that detailed integration of each air mission with the fire and movement of friendly forces is not required” (JP 3-0 2001a, GL-4). Interdiction is considered a form of fires directed at enemy surface forces.

JP 3-0 treats maneuver (employment of forces in the battlespace through movement in combination with fires to achieve a position of advantage in respect to the enemy in order to accomplish the mission. JP 1-02) and fires (the effects of lethal or nonlethal weapons, JP 3-0, 2001a, GL-9) as one mission. JP 3-0 ties fires and maneuver but only provides a JFC oversight mechanism for the fires role of the complementary operation and not the maneuver role. This control method is the JTCCB, which is limited to fires apparently because the traditional linear nature of the battlefield allows for

simplified coordination between surface maneuver forces, each which owns a defined area of operations.

The recent recognition of airpower as a maneuver force and the realization that future battlefields are becoming less linear complicates maneuver integration. Coordinating fires and maneuvers in non-linear, non-contiguous battlefields is crucial, but joint doctrine is not definitive in how the JFC will accomplish this vital task.

JP 3-0 provides further examples of the need to judiciously blend fire and maneuver: “JFCs may employ a scheme of maneuver that enhances interdiction operations or vice versa. For instance, actual or threatened maneuver can force an enemy to respond by attempting rapid maneuver or resupply. These reactions can provide excellent and vulnerable targets for interdiction” (2001a, IV-15). Further, “Airpower can maneuver at greater distances, while surface forces are able to maneuver more rapidly and project their influence at increasing depths. To be effective, JFCs should not allow an adversary sanctuary or respite” (2001a, III-11). Again, the joint publication stresses combining fires and maneuver as one operation to maximize the synergistic effect and deny the enemy a respite.

The potential problem lies in overseeing the integration of these forces. According to JP 3-60, “The purpose of the joint targeting process is to provide the commander with a methodology linking objectives with effects throughout the battlespace . . . its primary focus is to assist the commander to most effectively employ military resources to achieve the JFC’s objectives” (2002, I-1). The intent of JP 3-60 is to provide the joint organizational framework to help the JFC accomplish the command’s theater objectives. The publication allows for the creation of a joint fires element and or a joint targeting

steering group, but both have the same limitations--focused narrowly on fires--as the JTCB. There is a gap between the content and intent of JP 3-60 as to the amount of oversight the JFC has over theater-wide operations, specifically, the JFC's oversight mechanism is limited to fires instead of the entire operation.

An Army Command and General Staff College School of Advanced Military Studies monograph on Desert Storm highlights the lack of integration between fires and maneuver.

Air interdiction [in Desert Storm] enabled maneuver, but maneuver and operational fires did not always act in concert with each other. In fact, the opposite seemed to have happened. When ground maneuver gained a success, Army personnel complained that 'frequently [that it even] led to a loss of air support.' Using operational fires and maneuver in tandem implies that the two know what each other are doing. This does not seem to be the case in Desert Storm. (Forshee 1997, 25)

Nor, as discussed later in chapter 4, did the air and ground components know what the other was doing at the onset of Operation Anaconda.

The reason for a lack of oversight for maneuver and fire may lie in JP 3-0 guidance which states, "Within their designated AOs, land and naval force commanders integrate and synchronize maneuver, fires, and interdiction" (2001a, II-10). This authority implies that the surface commanders are responsible for integration within their AOs regardless of whether the maneuver or fires come from organic sources. Since surface maneuver forces normally do not cross AOs, the joint publications emphasized oversight for fires, which can and do cross AOs. This focus on fires only will continue to cause problems for integrating all aspects of joint operations.

In the 1980s, the Army's Training and Doctrine Command (TRADOC) and the Air Force's Tactical Air Command developed AirLand Battle. "According to the then-

current [1990] version of FM 100-5, *Operations*, airpower is an integral but subordinate element of the AirLand team. Throughout the document, air operations are depicted as fire support for ground maneuver . . . ground maneuver never supports air operations” (Mann 1995, 29). AirLand Battle in the mid-80s to the early 90s held that air would support land forces in all operations other than nuclear war. Air Force planners focused on air interdiction, battlefield air interdiction, and close air support (CAS). Most airmen considered strategic attack as nuclear attack. With the advent of precision weapons and stealth technology, it became possible for the Air Force to conduct strategic attack with conventional weapons, but few recognized this capability because the emphasis was on AirLand Battle. The Army view was that “. . . deep attack involves much more than just indiscriminate strikes by tactical aircraft at any lucrative object located in front of friendly forces. Instead, the commander carefully focuses his limited air power on targets most critical to the maneuver. . . . The integration and synchronization of combat power to strike deep, high-value targets creates synergism” (Scales 1993, 175). Thus it was, and still is, necessary to closely oversee fires and maneuver, especially at theater-level, to ensure the best use of limited resources.

The JFC’s first feat is to establish appropriate command relationships between components and establish a focus of effort for each operational phase. The command relationships may change depending on the focus of each phase and the JFC must ensure each commander knows the JFC’s intent. This command relationship is usually addressed through supported and supporting relationships.

Support is a command authority established by a superior commander between subordinate commanders when an organization should aid, protect, complement, or sustain another force. . . . Within a combatant command, JFCs may designate

one of their components or subordinate joint forces as a supported activity for a certain purpose and time. In fulfilling that responsibility, the supported commanders must coordinate, synchronize, and integrate the activities of the supporting commands in conjunction with their own forces under the JFC's overall supervision and authority. (JP 1 V-9, 10)

This supported and supporting relationship should improve integration and coordination between components. However, overlapping responsibilities do occur and cause confusion and friction among the components. For example, guidance within JP 3-0 states

The land and naval force commanders are the supported commanders within the areas of operations (AOs) designated by the JFC. Within their designated AOs, land and naval force commanders integrate and synchronize maneuver, fires, and interdiction. To facilitate this integration and synchronization, such commanders have the authority to designate target priority, effects, and timing of fires within their AOs.

The JFACC is the supported commander for the JFC's overall air interdiction effort, while land and naval component commanders are supported commanders for interdiction in their AOs.

In coordination with the land and/or naval force commander, those commanders designated by the JFC to execute theater- and/or JOA-wide [joint operations area] functions have the latitude to plan and execute these JFC prioritized operations and attack targets within land and naval AOs. If those operations would have adverse impact within a land or naval AO, the commander must readjust the plan, resolve the issue with the appropriate component commander, or consult with the JFC for resolution. (2001a, II-13)

Conflicts arise because the responsibility for interdiction within an AO can lay with either the JFACC or surface commanders. One statement in JP 3-0 states the land component sets the interdiction priority for his or her AO because he or she is the supported commander. Another statement highlights the JFACC as the supported commander for theater-wide interdiction. The final section states the JFACC could conduct interdiction within the JFLCC's AO as long as there is no "adverse impact." It is

obvious that conflicts will arise and, as noted, the JFC may need to resolve the issue because each component commander can cite, from doctrine, why he or she is the supported commander and should have authority to shape the battlefield as he or she sees fit.

Again, joint doctrine insists it is vital to integrate and synchronize maneuver and fires elements to create synergistic effects and defeat enemy forces. The challenge is integrating these capabilities from the different joint components in the same operation. Due to this difficulty, joint doctrine places a great deal of emphasis on joint planning and liaison work but shortcomings of both require commander-level involvement. A JFC mechanism to oversee maneuver and fire operations ninety-six, seventy-two, forty-eight, and twenty-four hours out could improve integration of air and surface maneuver forces.

Currently, the JFC oversight tool for fires is the JTCB, which JP 3-60, *Doctrine for Joint Targeting*, describes as an assembly “formed by the joint force commander to accomplish broad targeting oversight functions that may include but are not limited to coordinating targeting information, providing targeting guidance and priorities, and refining the joint integrated prioritized target list” (2002, GL-7). According to the Army position, the JTCB is needed because the JFLCC is the supported commander for interdiction within the land AO and thus sets the priority for interdiction targets. Additionally, “The Army, Navy, and Marine Corps argue that because airpower is a shared resource, they should equally share the responsibility for target selection as well. Thus, the JTCB focused on the JFACC and air targeting since a targeting board assured shared responsibility” (Moeller 1995, 19).

The Air Force, on the other hand, argues, “The principle of objective shapes priorities to allow air and space forces to concentrate on theater or campaign priorities and seeks to avoid the siphoning of force element to fragmented objectives” (AFDD 1 1997, 13). Some Air Force leaders believe that the Army is trying to gain control of the air war. “In this effort, Army doctrinaires have utilized such doctrinal devices as joint target [sic] coordination board and joint force fires coordinators at the theater joint force commander level, limiting the command authority of the joint force air component commander, or attempts to officially codify the dual hatting of the land component commander as the joint force commander” (Myers 1997, 5).

Although each service is following different individual doctrine in pursuit of the JFC’s objectives, these contentions underscore the doctrinal conflict. In fact, this conflict highlights the rationale for an oversight mechanism and the driving force for the creation of the JTCB. It is important to review why the JFC created the JTCB during the Gulf War.

JTCB Background

Development of the JTCB came out of Operation Desert Storm as a method for the JFC to oversee the JFACC’s targeting process. The JFACC was not a new idea in 1990, but Operation Desert Storm represented the first time the JFACC was used in a major conflict. JP 3-60, states, “With the advice of subordinate component commanders, JFCs set priorities, provide clear targeting guidance, and determine the weight of effort to be provided to various operations” (2002, vi). Despite this oversight directive in the joint doctrine, further steps were taken after the first use of the JFACC in 1991. The JFC created the JTCB during Operation Desert Storm because there was concern among some

Army leaders that JFACC was not placing the proper amount of effort at shaping the battlefield for the land offensive. The reason for the Army's concern came out after action reports and most complaints proved to be overstated.

One example from an *Airpower Journal* article "JFACC: Problems Associated with Battlefield Preparation in Desert Storm" was battle damage assessment differences between the Air Force and Army. In this case, Lieutenant General Yeosock briefed the JFC that despite over 2,000 sorties against Iraqi Republican Guard divisions, these troops were at 99 percent full strength. However, the criteria for battle damage assessment analysis included the requirement for multiple sources to count a kill and only three categories counted against enemy strength: tanks, armored personnel carriers, and artillery. The Air Force maintained the units were at lower levels of strength due to uncounted kills, and multiple attacks against ammunition depots, supply areas, command posts, and water supplies (Lewis 1994, 24-25). Additionally,

As the air war progress Army and Marine commanders became concerned that insufficient attention was being paid to shaping and preparing the battlefield for ground operations. . . . This restiveness resulted in the formation of a Joint Targeting Board under the deputy CINC [commander-in-chief]. The job of this board was to play a more active role in advising on air apportionment decisions and in targeting Iraqi forces of interest to U.S. ground commanders. (Winnefeld and Johnson 1994, 47)

The basic differences in doctrine interpretation started to have operational impacts and complaints by the different components that could no longer be wished away. Subsequently, joint doctrine formally established the JTCB to provide oversight to the air operations but there was no corresponding oversight for maneuver elements. In the past, this was not an issue since the maneuver forces only operated within their area of operations. Now, however, since airpower is recognized as a maneuver force in joint

publications and can operate over wide surface AOs, the JFC requires a tool to oversee maneuver and fires operations and ensure the proper weight of effort for operational objectives.

JP 3-60 describes the JTCB as an “integrating center for targeting oversight or a JFC-level review mechanism” (2002, III-10). It goes on to explain that, “The JTCB provides a forum in which all components can articulate strategies and priorities for future operations to ensure that they are synchronized and integrated. The JTCB normally facilitates and coordinates the targeting activities of the components to ensure that the JFC’s priorities are met” (JP 3-60 2002, III-10). In other words, the JTCB is a JFC-level oversight tool to ensure the integration and coordination of all components of targeting. This is the type of entity needed to effectively integrate airpower as a maneuver force.

Current Trends

Obviously, the Air Force and the Army do not agree on all aspects of integrating military power in a joint campaign. Because of this inherent conflict, some combatant commanders created or are developing theater specific guidance to avoid such trouble. European Command, Pacific Command, and more specifically, US Forces in Korea modified joint guidance to create the equivalent of a joint coordination board (JCB). The stated purpose of the JCB that United States Air Force Europe is developing for European Command is as follows:

The JCB serves as a forum for Commander-level review of the JTF [Joint Task Force] on-going and planned operations to assess and validate the continued relevance in meeting the Commander’s operations/campaign objectives. The purpose of the daily JCB is to provide the [Task Force] Commander and assessment of the progress in achieving broad theater effects objectives and strategy, coordinate assessment of effects to date, to provide structure to the coordination process, and to allow the JTF Commander the opportunity to meet,

discuss, and approve the various staff activities in the normal course of business. This JCB macro-level overview of effects includes the targeting process and provides coordination and synchronization for operations 24 to 96 hours out. . . . The JCB emphasizes the coordination and synchronization of the overall JTF effects effort by focusing the agenda on the future battle from both the JTF and component perspectives. (JCB Concept of Operations Brief August 2001)

The issue in Korea was the compact battlespace, specifically between the forward line of own troops and the fire support coordination line (FSCL). “The Combined Forces Commander . . . addressed this problem by appointing the JFACC as the ‘coordinating authority’ for operational fires between the FSCL and the DBSL [deep battle synchronization line]. Moreover, he said that in combat [the] JFLCC [forward line of own troops] can still attack time-sensitive targets between the FSCL and the forward boundary without informing JFACC” (D’Amico 1999, 75). This arrangement is a significant departure from the norm since it requires the land component to coordinate with the air component within the land component’s area of operation, but beyond the FSCL. The commanders in Korea did this because they recognized that,

Despite a lack of attention in joint pubs, the area between the JFLCC forward boundary and the FSCL is critical when synchronizing actions among joint forces, achieving economy of force, and establishing an optimal time-space-force relationship. Synchronization of actions beyond FSCL is key for operational momentum and integrated operational maneuvers focused on JFC objectives. (D’Amico 1999, 75)

Korea and United States Air Force Europe have very similar models and both emphasize coordination and oversight for all aspects of operations, not just fires. Both boards are chaired by the JFC or deputy JFC to provide command oversight and guidance to the short range, operational level activities of the components.

In addition to the above theater specific solutions, other proposals in current research and published works include a joint force fire coordinator, national joint

targeting center, a joint effects board, a joint coordination board, improvements to the FSCL control, joint effects coordination cell, fire support coordination boxes, and deep operations deconfliction. These studies, individually and combined, suggest that greater oversight is needed for the JFC to effectively manage a joint operation. Whatever the solution, it must remove the service “stovepipe” organizations to force true, lateral coordination and integration.

One proposal from an Air University paper, “Synchronizing Airpower and Firepower in the Deep Battle,” even suggests, “Includ[ing] all planned airpower, firepower, and maneuver operations beyond the fire support coordination line on the air tasking order” (Laughbaum 1999, 71). This recommendation may prove too drastic, complex, and inflexible but shows the extent some are suggesting to improve air-land coordination.

Air University is not the only institution assessing the problem. The issue is also recognized at the Army’s War College. Army Colonel Edward Flinn’s strategy research project, “Joint Targeting, Are Joint Tactics, Techniques and Procedures [JTTPs] Adequate?” stated, “That current JTTPs for targeting are adequate for synchronizing targeting and attacks against time sensitive targets but, are inadequate in helping component commanders synchronize targeting throughout the Joint Operational Area and particularly inside a surface component commander’s AO where targeting responsibilities may overlap” (Flinn1999, iii). Recognizing the shortfalls in joint doctrine, Colonel Flinn’s recommendation is to enhance the JTTPs, not the doctrine, to improve the integration and synchronization between the components.

The Joint Warfighting Center (JWC) at Fort Monroe, Virginia, published the *Joint Force Fires Coordinator Study* in 1997. The purpose of the study was “to analyze the joint force fires coordinator concept while considering advantages / disadvantages, long-range implications, impact on joint doctrine and joint targeting procedures, and lessons learned from joint exercises” (JWC 1997, I-1). The JWC recommended including a joint force fires coordinator to improve integration after finding shortcomings in the current joint procedures. Additional findings from the report indicated some senior mentors felt the joint force fires coordinator functions should migrate towards synchronization of maneuver and interdiction as well (JWC 1997, EX-4). In summary, the JWC study found current procedures lacking and recommended improvements to planning and oversight processes.

The JWC’s conclusion was similar to the observations from an article written by a member of TRADOC’s “Army after Next” project reviewing the result of 1999 tactical-level and operational-level war games (TWG), which are a critical part of the Army’s future-warfare laboratory. “The TWG’s most important insight is that successful military operations in the twenty-first century will require the judicious orchestration of all assets within the combined task force” (Echevarria 1999, 72). He also noted that the success on the battlefield would depend on how well the services fuse airpower and land power.

Summary

The literature review reveals that fires and maneuver are doctrinally treated as a cooperative operation. The specific proposals highlighted are focused on the oversight systems available to the JFC vice the actual planning and liaison. The proper establishment of the doctrinal joint component organization is the first step in improving

joint planning and coordination. Doctrine emphasizes joint planning and liaison to facilitate integration of fires and maneuver but provides only the JTCB as an oversight means for the JFC. While the JTCB has elements of planning, liaison, and oversight, it doctrinally does not focus beyond fires. There is sufficient information for a historical analysis of Operations Desert Storm and Anaconda in support of the problems associated with integrating Army and Air Force fire and maneuver forces. The next chapter will explore the methodology for a logical analysis of the information provided in the literature review.

CHAPTER 3

METHODOLOGY

The airman tends to see himself as an independent operator who does not want the flexibility of his instrument shackled to the limitations of the surface. The soldier on the ground may intellectually comprehend the benefits to be derived from the independent application of airpower, but he also has a very real desire for its effects to be useful to his immediate milieu of land warfare. (1992, 33)

Harold R. Winton, *Parameters*

Adherence to dogma has destroyed more armies and cost more battles than anything in war. (2000)

Air Campaign Planning Handbook

Introduction

The objective of this research project is to determine whether the JTCB should evolve into a JMFCB to provide the JFC an oversight mechanism for integration of maneuver forces as well as fires. Despite the best of intentions, airman and soldiers think differently and someone must make sure the well-meaning component commanders' staffs optimize their efforts. The JFC needs an oversight system to ensure the best use of limited resources and that each component applies the appropriate weight of effort as desired by the JFC's plan. Because airpower can quickly transcend corps boundaries, existing joint doctrine may be insufficient to ensure the proper integration and supervision of land and air forces in accordance with the weight of effort directed by the JFC. This chapter will explain the methodology for analyzing the existing doctrine and historic events as regards to joint oversight and the possible use of a JMFCB.

Subjects

To ensure thorough coverage of this topic, an analysis of joint, Air Force, and Army doctrine preceded a study of operational application of joint combat during Operations Desert Storm and Anaconda. Joint doctrine provides the foundation for planning and conducting joint operations. Since joint oversight is the primary issue, a thorough examination of joint doctrine pertaining to JFC oversight must start this study.

After thoroughly reviewing joint doctrine, the next step was to examine service doctrine, primarily Air Force AFDD 1 and AFDD 2 and Army FM 3-0 and FM 101-5, *Staff Organization and Operations*, for service oversight functions and JFC interaction. Army doctrine covers maneuver warfare and the integrating and planning of using maneuver forces in-depth. The goal of the service doctrine study is to examine each component's oversight mechanisms to determine how they fit into the joint process. For example, the Air Force doctrine fully supports the JFACC concept but stresses that airpower is not just a form of fire to support the ground offensive but can be decisive through independent action.

Following the review of existing doctrinal guidance on JFC oversight, this thesis concentrates on an historical analysis of Operation Desert Storm and Operation Anaconda. The focus for the Operation Desert Storm study will be on the actions of the third day of the ground war when the bulk of the Republican Guard forces escaped destruction from both the air and land forces pursuing them. The focus for the Operation Anaconda study will be on the breakdown in oversight that failed to discover the disconnect between the ground forces need for firepower and the lack of airpower involvement in the planning process.

Criteria

This research methodology is based upon the Feasibility, Acceptability, and Suitability Test described in joint doctrine. JP 5.0 states, "Joint operation plans are developed in conformance with the criteria of adequacy, feasibility, acceptability, and compliance with joint doctrine" (1995, I-13). The test is now more commonly called the FAS Test, but the concept is the same: a plan or concept is analyzed using the three criteria defined below and must also comply with joint doctrine and military law. Feasibility determines whether the plan can accomplish assigned tasks with available resources within the planned time frames. Acceptability examines whether plans are proportional and worth the anticipated cost. Finally, suitability determines whether the scope and concept of planned operations satisfy the tasking and will accomplish the mission.

Procedure

The FAS Test was the criteria to determine whether the establishment of a JMFCB could have contributed to solving the problems created by oversight breakdown. The FAS Test evaluated whether a JMFCB could have prevented some problems during Operations Desert Storm and Anaconda. While this analysis may not be completely conclusive, since it is based upon theoretical applications, it can provide insight into the potential of an oversight mechanism like the JMFCB.

Additionally, establishing a new board during a conflict has precedence with the JTCB during the Gulf War. The JTCB was established to make sure the JFC had oversight over the JFACC's air effort during Operation Desert Storm. No similar joint board currently exists in doctrine and the JMFCB will be similar in purpose to the JTCB.

Thus, the one measure of effectiveness will be if the JFC has oversight of maneuver and fires operations ninety-six, seventy-two, forty-eight, and twenty-four hours out as the JTCB enables for fires oversight. Four documents: JP 3-60, *Joint Doctrine for Targeting*; JP 3-09, *Doctrine for Joint Fire Support*; JP 3-56.1, *Command and Control for Joint Air Operations*; and JP 5-00.2, *Joint Task Force Planning Guidance and Procedures* describe the function and possible use of the JTCB and will provide the baseline for examination of a possible JMFCB, since maneuver and fires must be closely integrated.

Summary

This research paper explores the idea of changing joint doctrine to evolve the JTCB into a JMFCB so that the JFC has oversight into more than joint targeting. After exploring existing joint and service doctrine for oversight mechanism, the FAS Test will be used to predict whether a JMFCB could have corrected certain problems encountered during Operations Desert Storm and Anaconda. This analysis will lead to some conclusions and recommendations in the last chapter.

CHAPTER 4

ANALYSIS

Introduction

If I always appear prepared, it is because before entering an undertaking, I have meditated long and have foreseen what may occur. It is not genius which reveals to me suddenly and secretly what I should do in circumstances unexpected by others; it is thought and preparation. (AFDD 2 2000, 85)

Napoleon Bonaparte

Fire and maneuver win battles. The purpose of movement is to get fires in a more advantageous place to play on the enemy. [To this end] Air and Ground commanders must be constantly on the alert to devise and use new methods of cooperation . . . for there can never be too many projectiles in a battle. (Quintrall 2002, 7)

General George S. Patton, Jr.

As Napoleon pointed out, planning and preparation are two keys to victory.

Unfortunately, sometimes there are breakdowns in planning, liaison work, or unexpected action by the enemy or friendly forces that create opportunities for both sides in a conflict. Often, it is the side that can best handle this fog and friction that achieves victory. Joint doctrine lays the framework through which the JFC sets up an organization to conduct military operations, achieve theater objectives and, hopefully minimize the impact of fog and friction. This chapter will quickly review the current doctrine on integrating maneuver and fires and examine two past operations where apparent breakdowns created seams and sanctuaries exploited by enemy forces.

As demonstrated in chapter 2 of this thesis, joint doctrine stresses the need to integrate fires and maneuver but does not provide the JFC with a sufficient oversight mechanism to ensure both are seamlessly blended into a single operation. The need for

JFC-level oversight is due to the conflicts between Air Force and Army doctrine and the need for a single overall commander orchestrating operational control of the battle. Air Force doctrine stresses the need for centralized control of airpower by an airman and warns against the use of airpower solely as a support mechanism for ground forces. Army doctrine emphasizes the JFLCC's control of shaping the battlefield in his AO. To do this, the JFLCC needs to have a free hand to conduct maneuver operations within his AO and direct fires to support the scheme of maneuver. The doctrinally provided oversight mechanism for the JFC is the JTCB. An analysis of Operations Desert Storm and Anaconda will determine if the JTCB, as described in JP 3-60, provided sufficient oversight by the JFC for integrating maneuver and fires effectively for those operations.

Operation Desert Storm

Background

Operation Desert Storm, a very successful war against Iraq, employed air, land, and sea forces to defeat and drive the Iraqi military forces from Kuwait. It was likely the first war since World War II that saw US air forces under some form of JFACC control (Winnefeld and Johnson 1996, 264). From the Air Force's point of view, this central control was paramount to a successful air campaign because, according to AFDD 1, the first tenet of airpower is centralized control (by an airman) and decentralized execution (AFDD 1 1997, 23). A single JFACC and single air tasking order avoided past mistakes of inadvertent dispersion of airpower due to high demand and the JFACC focused on those priorities that led to victory.

As satisfied as the Air Force was with the process, the Army was dissatisfied. In a 1996 jointly written article by the then chiefs of the Air Force and Army, they stated,

“The Air Force considered JFACCs as best suited to coordinate operations beyond the FSCLs, while the Army thought LCCs [land component commanders] should plan and synchronize fires in the entire land AO” (Reimer and Fogleman 1996, 10). This basic disagreement led to the development of the JTCB in the first place. The same article points out, “The JTCB concept has been controversial since the Gulf War. The Air Force held that the board would hinder operations, while the Army contended that it was necessary to establish targeting priorities” (Reimer and Fogleman 1996, 12). On the one hand, the Army chief’s main complaint was the perceived lack of shaping support in the land force’s area of operations prior to the start of the ground war. On the other hand, the Air Force did not want to dissipate the strategic air campaign’s resources going after individual targets, such as tanks.

The JTCB was devised to balance the concerns of land and air component commanders’ priorities with the JFC campaign objectives. The problem was that the JTCB only covered the fires aspect of the war. Army ground commanders, Generals

Luck and Franks timed their plan to shape the battlefield in relation to G-Day, the first day of ground operations. Both commanders wanted seven days of sustained air attacks directed at Iraqi units in their path of advance, but they were in the dark as to exactly when G-Day would occur. Consequently, in January, at the very beginning of the air operation, the corps commanders began submitting target nominations [in an effort to] shape the battlefield from south to north. (Scales 1993, 180)

The corps commanders complained when the targets were not attacked immediately by airpower even though shaping operations were more appropriately timed to the beginning of the ground campaign and not to the beginning of the air campaign. Essentially, the problem was twofold: the lack of understanding of the joint campaign by

the corps commanders and the lack of a forum to voice concerns and plans for fires and maneuver.

This lack of understanding of the entire battle plan and limited integration of surface and air forces created a sanctuary for the enemy forces.

There were times when the rapid FSCL movement hindered air operations while it benefited the enemy. Probably the number one mistake of the ground campaign occurred on G+3. Seventh Corps pushed the FSCL 50 miles beyond their position covering the escape of the Hammurabi and Madina Republican Guard divisions headed north. Both General Horner and General Glosson attempted to get General Schwarzkopf to move the FSCL south towards the Kuwaiti border, but Gen Frederick M. Franks talked him out of it. As a result, the two divisions escaped. Overwhelming force could not be applied because every sortie flown inside the FSCL had to be controlled by a FAC [forward air controller]. (Lewis 1994, 15)

The air component and corps commander lacked an integrated plan. General Schwarzkopf acted as both the JFC and JFLCC and apparently made assumptions about integration between the air and land forces during the very successful ground campaign but did not ensure that integration took place. There was no formal mechanism to provide the JFC with oversight for both maneuver and fires forces.

FAS Test for Operation Desert Storm

Feasibility

Could a JMFCB have been that formal mechanism for JFC oversight and would that have helped prevent the Republican Guard sanctuary? The FAS Test provides a method of analyzing the above question. The first step in the FAS Test is determining whether a JMFCB was feasible, or, in other words, could it have been achieved using the available means and resources? Feasibility also questions whether there is a reasonable chance of success? By the time the air war started, American and coalition forces had been building up in Southwest Asia for five months, and it was more than a month after

the start of the air campaign that the ground phase began. The major staffs were all located in Riyadh, Saudi Arabia, and the commanders had been in place for months as well. JP 3-60 describes the role of the JTCB as described in chapter 2 of this thesis. Looking at the feasibility of the JTCB evolving to a JMFCB one could modify the JTCB description to apply for a JMFCB as follows:

The ~~JTCB~~ [JMFCB] provides a forum in which all components can articulate strategies and priorities for future operations to ensure that they are synchronized and integrated. The ~~JTCB~~ [JMFCB] normally facilitates and coordinates the ~~targeting~~ [fires and maneuvers] activities of the components to ensure that the JFC's priorities are met. The ~~JTCB~~ [JMFCB] and/or JFC typically address specific ~~target~~ [maneuver and fires] issues not previously resolved. [modified] (JTCB definition from JP 3-60 2002, III-10)

The staffs were already conducting a JTCB, indicating the resources in place and available to conduct a JMFCB. The modified definition of the JTCB, to encompass the scope of the JMFCB, creates an achievable condition. As with the JTCB, the components would try to resolve issues at the lowest possible level before bringing it to the JMFCB or JFC for command direction to keep the board at the appropriate operational level focus for the JFC.

Acceptability

After examining feasibility in the first step of the FAS Test, the second step in the FAS test is to examine whether or not the JMFCB would have been acceptable.

Acceptable means worth the cost in manpower, materiel, and time involved; is consistent with the laws of war; and is militarily and politically supportable (JP 1-02 2001, 1). Also, is it worth the effort to expend the means available? As stated earlier in this chapter, the Air Force was opposed to the idea of the JTCB, fearing it would hinder operations. The likelihood is that the Air Force would also balk at introducing a different oversight board,

especially one more tied to ground operations. It would be fearful that such a board would demand a more supporting role for airpower or lessen the JFACC role in controlling air assets.

The Army would probably hesitate to support the idea of a JMFCB because its doctrine, as well as joint doctrine, states, “Within their designated AOs, land and naval force commanders integrate and synchronize maneuver, fires, and interdiction. To facilitate this integration and synchronization, such commanders have the authority to designate target priority, effects, and timing of fires within their AOs” (JP 3-0 2001a, II-9). Thus, from an Army’s point of view, the JMFCB would not be necessary since they have the responsibility within their entire AO and a board of this type would take away from the land commander’s ability to shape the battlefield.

However, the Army does believe there is a need for a JTCB. According to the *Gulf War Air Power Survey* during Desert Storm, “The absence of such a board [with the JFC in charge] meant that a formal communications channel did not exist for Army corps commanders to express their concerns to the Commander in Chief and the Joint Force Air Component Commander about targeting. From their perspectives, the coalition air attacks were not doing a lot of apparent damage to enemy forces facing Army units” (Cohen 1993, 63). The survey goes on to state, “There was no effective joint campaign oversight on the part of CENTCOM’s [Central Command] staff. The fact that CENTCOM operations officers served as shift workers in CENTCOM’s operations room, instead of matching reports from the JFACC against an overall theater combined arms campaign plan, tends to substantiate the point” (Cohen 1993, 63). The report further states that General Horner’s staff lacked the resources to explain to the Army and Marine ground

commanders the “theater-wide and corps-specific consequences of the air war” (Cohen 1993, 64). The report indicates the problems the staff organization had ensuring integration and synchronization of resources. Once the ground war began, the JFACC lacked insight into the ground movements of friendly forces. The Army’s battlefield coordination element (now called the battlefield coordination detachment (BCD) in the Theater Air Control Center did not always know where the advancing Army units were, making it “almost impossible in many cases for the JFACC’s staff to track the advance, despite Horner’s efforts to guarantee air-ground staff coordination” (Cohen 1993, 65). The above experiences indicate that a JFC-level oversight mechanism for maneuvers and fires should benefit ground and air component commanders and should be acceptable.

Suitability

The final step of the FAS Test is suitability. Suitability means, could the JMFCB be the appropriate tool to get the job done? Suitability also questions whether attainment of the objective, the JMFCB, would accomplish the desired effect. This is the most important of the three facets of the FAS Test. Feasibility is usually a yes or no question, while acceptability can be political and gray. Simply because the services resist the idea of a JMFCB is not in and of itself sufficient reason to avoid creating one. The biggest issue, as the one given the most weight in this FAS test, is whether or not a JMFCB is the right tool for the job. The JFC must accomplish the given strategic and operational objectives. The JFC’s job is to integrate and synchronize all assets available to accomplish those objectives. Although current joint doctrine gives the JFC much latitude in developing the command structure, the oversight tool designated in doctrine, the JTCB, provides oversight for only one portion of the JFC’s tool of fires and maneuver. JP

3-0 holds that fire and maneuver should be considered an indistinguishable entity, therefore, it would seem logical that any oversight board, such as a JMFCB, would also cover both maneuver and fires. While liaisons exist within each component commander's staff, they can only go so far in ensuring integration of air, land, and sea forces and usually lack the rank or authority to properly overcome doctrinal and operational disconnects.

The senior Army liaison element within the JFACC's joint air operations center is the BCD. The BCD is a small team led by a colonel whose mission is to process the JFLCC's air support requests, target nominations, and "acts throughout planning and execution to ensure proper representation of ground component priorities in the overall process" (AFDD 2-1.3 1999, 51). On the air side, the air support operations center, "Normally aligned with the senior Army tactical level of command . . . coordinates and directs aerospace support for land forces at corps level and below. It is subordinate to the JAOC [joint air operations center], and is responsible for the coordination and control of air component missions within its associated ground component's area of operation" (AFDD 2-1.3 1999, 52). Therefore, liaisons exist but their effectiveness has the potential to be limited, particularly by inter-service disagreement.

The effectiveness of these liaisons impacts the integration of the individual service forces. However, even more important than liaisons, the real need is the JFC-level oversight. Because it is the JFC's responsibility, he or she should have an oversight mechanism to review the operational level activities ninety-six, seventy-two, forty-eight, and twenty-four hours out to make sure the component commanders are placing the appropriate weight of effort towards achieving stated objectives and intent. Thus, a board

to provide oversight for on-going operations at the campaign level is one suitable solution toward better integration of airpower and land power.

The problems associated with battlefield preparation for the start of the ground campaign demonstrated the need to coordinate both maneuver and fires in one board. During Desert Storm, the Army utilized a Deep Battle Cell (now called the Deep Operations Coordination Cell) to nominate targets for interdiction.

The source of friction . . . seems to have centered on the application of air power against numerous discrete and routine enemy positions on the desert floor and principally in the breach sites [location where the ground forces would push through the Iraqi defenses]. These positions collectively threatened the success of the initial ground assault but individually could not compete with other theater-level priorities. (Swain 1997, 186)

Air forces were executing a theater-wide air campaign and balanced the limited air resources against the numerous interdiction, CAS, and strategic air targets. Targets nominated by the Army were part of a unified list of hundreds of targets, and the importance of these targets did not stand out without a clearer definition of the ground scheme of maneuver. Additionally, the corps commanders needed to look beyond their AO--to look theater-wide as well--especially since General Schwarzkopf, acting as both the JFC and JFLCC, was giving target priority guidance directly to the JFACC. A US Army Forces Central Command situation report for 18 February 1991 stated:

Air support related issues continue to plague final preparation for offensive operations and raise doubts concerning our ability to effectively shape the battlefield prior to initiation of the ground campaign. Too few sorties are made available to VII and XVIII ABN [Airborne] Corps. And while air support missions are being flown against 1st echelon enemy divisions, Army nominated targets are not being serviced. *Efforts must be taken now to align the objectives of the air and ground campaign* and ensure the success of future operations (emphasis added). (Swain 1997, 189,

The critical concern is that there was no single entity looking at integrating and coordinating both fires and maneuver theater-wide. Although not debilitating, this lack of understanding proved a source of frustration for both land and air components and concern on the eve of the ground campaign.

Operation Desert Storm Summary

In the end, Desert Storm was successful. However, at the joint level, lack of integration and coordination unintentionally created a sanctuary for the fleeing Republican Guard units that were an objective to destroy. While there were many reasons for the creation of this sanctuary, better integration and coordination between maneuver and fires elements could have prevented the creation of the sanctuary, or could have reduced or eliminated it after the military units discovered it.

Operation Anaconda

Background

While Desert Storm was a huge endeavor with months of build up, Operation Anaconda was a much smaller scale operation with a much shorter build up of limited forces. Operations in Afghanistan in response to 11 September 2001 attacks were not the typical meeting of conventional forces. Afghanistan presented a non-contiguous battlefield with a great number of Special Operations soldiers, Central Intelligence Agency agents, partisans, and civilians spread throughout the country. Normal procedures called for restricted or no-fire areas over Special Forces soldiers but that was not feasible in all circumstances. At the peak of Anaconda, there were more than 200 fire support coordination measures in place (Grant 2003, 57). A *Field Artillery* article noted, “The successful employment of fires in the AJOA [Afghanistan Joint Operations Area],

specifically during Operation Anaconda in the Shah-e-Kot Valley, demanded an unprecedented level of interoperability among disparate agencies and organizations” (Bentley 2002, 10). Although this interoperability should have increased coordination efforts between components, air and land cooperation was nonetheless inadequate at times.

Secretary of Defense Donald Rumsfeld noted the land and air synergy early in the Afghanistan operations,

We feel that the air campaign has been effective. The fact that for a period we did not have good targets has now shifted, because we are getting much better information from the ground in terms of targets. Also, the pressure that has been put on fairly continuously these past weeks has forced people to move and to change locations in a way that gives additional targeting opportunity. (Hebert 2002, 14)

Obviously, in this situation, fire and maneuver forces needed to be very closely coordinated. Additionally, due to the high altitude, rough terrain, and the nature of the enemy threat, the land forces deployed with only a handful of mortars and no artillery. Consequently, airpower provided the preponderance of fires after the land forces found themselves heavily engaged.

Initial efforts in Afghanistan during the October 2001 Battle of Mazar-i-Sharif witnessed very good coordination between air and land forces. The Afghani ground forces supported by American Special Forces and US airpower won a decisive victory over the Taliban forces and captured the key city of Mazar-i-Sharif. This air-land cooperation continued with the capture of Kabul in mid-November.

As successful as the coordination was during initial operations, the beginning of 2002 saw a lack of coordination as the land forces began planning for a ground operation

to inflict serious losses unto Taliban fighters. The operational concept was to use Afghani forces to maneuver toward the dispersed enemy troops and force them into a preplanned blocking force of American soldiers. Although ground operations were well planned by the American surface forces and their coalition allies, airpower planners were left out of the planning process until as late as twenty-four hours before the start of Anaconda. (Grossman 2002, 3) Using a combination of ground and air maneuver elements to find, fix, and destroy the enemy was a viable solution given the terrain and enemy. However, lack of integration during the planning phase prevented a true blending of these resources.

The ground forces thought that they would not need the additional firepower. That might have been the case had they met the type of resistance anticipated by intelligence analysis. As the transport helicopters met heavy fire, General “Franks speculated that, had Roberts [Navy Seal, Petty Officer Neil Roberts who fell from the helicopter after a rocket propelled grenade struck it] not been left behind, the forces would simply backed off and called in an air strike” (Grant 2002, 67). The other problem was the difficulty the Afghani forces had at executing their portion of the plan. They were to be the main effort and their premature withdrawal left the American forces virtually surrounded by enemy forces and under heavy automatic weapon and mortar fire.

Initial Army planning excluded airpower despite the ground commander’s intention to use airpower fires if required. In an interview with *Field Artillery*, Major General Franklin Hagenbeck, commander of the US Army’s 10th Mountain Division, said, “We didn’t consider bringing in 105s [105mm artillery] because I knew we could accomplish the mission without them. . . . With the limited number of assets we brought

into Afghanistan, it was clear we could capitalize on our mortars as well as on the Army, Air Force, Marine and Navy aviation assets” (McElroy 2002, 5).

As the battle developed, Army forces had difficulty getting mortars into the battle early due to hot landing zones. According to Hagenbeck, Army Apaches performed very well; nonetheless they got “shot up pretty good” and only two of six employed the first day were still mission capable (McElroy 2002, 7). Fixed-winged aircraft, however, proved more survivable.

In addition to the problems the hot landing zones created, the difficult terrain hindered the effectiveness of the available mortars and airstrikes.

The hills were just really steep, and really rocky, and really jagged and craggy . . . and it was very hard to talk the pilots onto the targets, to try and get them to identify the targets. And then also [it was] pretty hard to get the bombs actually on the targets because if a bomb was a couple of hundred yards off the target horizontal, with the vertical interval there going up a mountainside, it could mean that it was off over 500 yards.” (Grossman 2002, 7)

This type of terrain required extensive mission planning for effective weapons employment. The Army did not give the airmen sufficient notice of the operation for adequate mission planning.

As a result of the Army providing limited information on the planned ground operation, the Air Force placed only a few aircraft on airborne alert to support the ground forces in the region. These aircraft were needed immediately, as were Army aviation assets, but the flow of aircraft was not sufficient to apply overwhelming firepower in support of the ground forces. Many aircraft simply exhausted their ammunition too fast to stay on station long enough to cover until the next aircraft were available. To make matters worse, the best types of aircraft for this mission were not on station because of

lack of integrated planning for the aggressive enemy action. The Army would have preferred that A-10 ground attack aircraft be available, but these were still in Kuwait supporting Operation Southern Watch. After the scope of Operation Anaconda became evident, the Air Force quickly deployed a few A-10s to forward operating bases in Afghanistan. Unfortunately, it took longer to get the logistics and maintenance support in place to fully support a high level of taskings. While the aircraft were trying to move into Afghanistan, aircraft flew combat and support missions from Kuwait. The use of Kuwaiti-based aircraft meant long transit times, huge requirements for air refueling, and lack of quick response due to time and space limitations.

The aircraft that were able to respond were working the best they could to support the ground forces. On occasion, there were safety issues with multiple aircraft operating in an area that, at times shrunk to less than five by nine kilometers. The proper command and control procedures were not worked out in advance because air planners did not know what the ground forces had planned. Additionally, Air Force, Navy, and Marine fighters and bombers equipped with multiple joint direct attack munitions had not worked out all of the procedures for using joint direct attack munitions in a CAS role or how to deconflict weapons release from high altitude while other attack aviation (fixed wing and helicopters) operated at lower altitudes.

The excellent work by the ground tactical and combat controllers calling in the strikes and the aviators' skills overcame many of the shortfalls created by poor planning. The free-for-all nature of the operation resulted in numerous calls for fires from Special Forces, Tactical Air Control Parties, and combat controllers all spread over the small battlefield, overwhelming the request system in place with both calls requesting fires and

calls to abort attacks for various reasons. The problems may not have been altogether avoidable but a JFC level oversight mechanism analyzing maneuver and fires operations ninety-six, seventy-two, forty-eight, and twenty-four hours out could possibly have seen a problem early in the Anaconda planning. Knowing the plan would go to a JFC-level board to highlight the maneuver operation may have prompted ground commanders to coordinate with airpower planners in advance of the operation start date.

Regardless of the causes of the problems between air and ground commanders, “A virtual firestorm between the two services erupted last fall when Anaconda’s two-star Army commander griped in an interview about insufficient air support for ground troops in the Mar 2002 Anaconda operation. In turn, Navy, Marine Corps and Air Force officers said the Anaconda commander, Army Maj. Gen. Franklin Hagenbeck, had kept them out of the loop in battle planning until the 11th hour” (Grossman 2002, 1). Despite the above difficulties, Operation Anaconda proved successful at defeating a stubborn enemy force in a difficult hostile environment. A JFC oversight function reviewing the maneuver force’s plan might have caught the operational disconnect that omitted airpower planners and ensured the proper integration with fires for the conduct of the mission.

FAS Test for Operation Anaconda

Feasibility

Could a joint maneuver and fires coordination board have improved the conduct of Operation Anaconda with respect to integrating fires (provided by airpower) and maneuver (provided by the ground forces)? The FAS Test can evaluate this question. The first step is feasibility. The scope of the conflict and the resources available for Operation Anaconda pale in comparison to Operation Desert Storm, collaborative planning tools,

such as video teleconferencing and secure internet chat rooms, facilitated a joint board despite the fact that the key players were not at the same location.

Additionally, since the planned operation was designed as a small action involving primarily Afghani forces (supported by US ground and air forces), the level of integration required was considerably less. An oversight board for both maneuver and fires could have ensured awareness of all components to the ground operation. Thus appropriate resources would have been positioned and ready for the unforeseen circumstances that precipitated additional firepower. Based on the above analysis, the JMFCB would have been feasible for Operation Anaconda.

Acceptability

Another criterion to the FAS Test is acceptability. The same arguments against a JMFCB for Operation Desert Storm applied to Operation Anaconda. The biggest hurdle to a JMFCB may be the perceived loss of control and increased hindrance to operations by allowing one component to dictate tactics or operational guidance to another component commander. This will always be somewhat of an issue, especially with smaller scale operations like Anaconda. Commanders tend to feel that a large scale, fully developed staff may not be necessary for smaller scale operations and resist establishing the proper mechanisms early in the conflict. If all components are not going to fight, one could reason, why involve all components in the planning? The answer is simple: something unexpected may occur requiring the application of additional forces that need time to plan and position themselves for such assistance.

Suitability

The final step of the FAS Test is the suitability of the JMFCB for Operation Anaconda. For the same reasons that the JMFCB would have been suitable during Desert Storm, it would have been suitable during Anaconda. A meeting that requires review of maneuver and fires plans and operations ninety-six, seventy-two, forty-eight, and twenty-four hours out to ensure the proper weight of effort towards the JFC's operational objectives would have recognized the disconnect between the land campaign and lack of air support. Air resources could have been released from their Operation Southern Watch mission in time to get to Anaconda. This plan probably would have called for aircraft to forward-deploy with sufficient assets for sustained operations, and ensured development of air tasking to provide maximum available airpower. Strike aircraft also need supporting assets--tankers; suppression of enemy air defense aircraft; intelligence, surveillance, and reconnaissance aircraft; and command and control aircraft--integrated into the planning. If these resources had been determined not to be available during the planned ground offensive, the JFC then could have made an informed decision of the appropriate course of action: delay the offensive until airpower was available, divert airpower from other missions, compensate for lack of airpower by including artillery or mortars in the ground campaign, or execute the mission as planned knowing there would be a lack of air support.

Operation Anaconda Summary

Operation Anaconda demonstrated the need to include all components in the planning process from the beginning. The ground forces launched a major offensive without properly informing the air component. Airpower ended up used more than

originally planned by the Army. In fact, airpower delivered six million pounds of ordnance during Operation Anaconda (Grossman 2002, 7). Airpower could have better applied that ordnance had it not been a “free-for-all” at the beginning of the operation due to lack of significant planned CAS. The FAS Test illustrates that a JMFCB may have lent itself to correcting some planning problems early enough to better prepare both the air and land components before beginning the operation. The JFC had no such oversight mechanism in place and planning and liaison shortfalls went unnoticed until it was too late to do anything except react to the situation. The US military prefers to be proactive rather than reactive.

Summary

Operations Desert Storm and Anaconda were successful but integration problems between the land and air components created conditions the enemy exploited. An over-extended fire support coordination line created a temporary sanctuary for the Iraqi Republican Guard forces during Desert Storm. During Anaconda, there was a lack of sufficient firepower initially as ground forces came under unexpectedly heavy enemy fire.

There are many possible ways to improve integration efforts between the air and ground components. This chapter illustrated that, among the possibilities, a joint maneuver and fires coordination board would have passed the FAS Test. The last chapter will give recommendations based upon this analysis and suggest areas for further study on the subject of joint oversight.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The only thing harder than getting a new idea into the military mind is to get an old one out. (Charlton 2002, 89)

B.H. Liddell Hart

There is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things. For he who introduces it has all those who profit from the old system as his enemies, and he has only lukewarm allies in all those who might profit from the new system. (Quintrall 2002, 14)

Niccolo Machiavelli

This thesis showed that joint and service doctrines stress the importance of closely integrating maneuver and fires as complementary operations to maximize their synergistic effect. Moreover, joint doctrine provides for joint planning and liaisons to ensure effectiveness of the joint force. However, as demonstrated in the preceding chapters, significant problems can arise when there is a breakdown in the joint planning or liaison efforts. These potential problems can create possibly exploitable seams or sanctuaries for the enemy. Although the JTCB provides an oversight mechanism for the JFC to identify planning or liaison breakdowns and operational disconnects, doctrinally the JTCB focuses primarily on fires. Unfortunately, joint doctrine does not provide the JFC with an oversight mechanism for both maneuver and fires. This thesis suggests the need for the JFC to oversee both maneuver and fires and, specifically, argues that the JTCB, as described in JP 3-60, *Joint Doctrine for Targeting*, is limited in its ability to

provide the JFC the appropriate level of oversight to minimize potential seams and sanctuaries, while keeping the forces responsive to unanticipated actions.

The creation of a JMFCB should improve the integration and synchronization of maneuver and fires within joint operations. This thesis illustrated, through analysis of Operations Desert Storm and Anaconda, how a JMFCB could improve integration in the planning and execution processes in various theaters and operations.

Conclusion

This thesis examined the oversight mechanisms doctrinally available to the JFC. After reviewing doctrine and historical case studies, it concluded that potential problems exist within the current doctrine on the conduct of joint operations. During Operation Desert Storm, a disconnect between the JFACC and JFLCC over FSCL placement left the vulnerable Iraqi Republican Guards troops in a position where the US could have but did not attack. The troops were too far from the forward line of own troops for the Army to attack with organic assets and airpower was not committed since there were no terminal controllers in position to coordinate the attack. Terminal control is normally required for attacks between the forward line of own troops and FSCL. This coordination breakdown went unchecked and enemy forces escaped destruction.

During Operation Anaconda, the ground component staff planned their mission isolated from the air component staff. The air component had only a few hours notice of this major ground offensive and, because of operational constraints, could only get a few sorties prepared to support a ground mission that had been planned for a month. When the ground troops encountered unexpectedly heavy enemy resistance, airpower was not prepared to respond as quickly and as violently as it should have. This coordination and

integration breakdown left American soldiers in a dangerous situation that could have resulted in many more casualties except for the heroic actions of those on the ground and in the air.

The JFC lacks the formal, doctrinally directed oversight mechanism to ensure sufficient planning and liaison are conducted early enough to prevent the inadvertent creation of favorable conditions for the enemy. Theater specific tactics, techniques, and procedures, such as those established in Europe and Korea, are a solid start to solving the potential problems within a well-established area of operation. Because the military is obviously unable to accurately predict every potential combat area, it needs set guidelines that any mix of forces can follow. In other words, the ideas embraced in the tactics, techniques, and procedures need to be included in joint doctrine to provide a foundation for any joint military operation.

Recommendations

An examination of doctrine and current practices demonstrated that, despite the military's best efforts, potential breakdowns exist in joint planning and liaison. To minimize the risks to joint forces conducting large-scale operations, this thesis recognizes four possible options for joint operations in the future:

1. Maintain the current joint doctrine and organizational structure as is, allowing the JFC to organize and oversees their forces as they deem best for their theaters.
2. Maintain the current joint doctrine and organizational structure with minor modifications to enhance awareness of the overall battle plan, such as expanding the agenda of the JTCCB beyond just fires or increasing the ranks of the liaisons at each component commander's headquarters.

3. Create a new oversight board focused on integration and synchronization of both maneuver and fires.

4. Create a national joint targeting center to assist the JFC in the selection of targets within his or her theater. As suggested in a 2000 *Air and Space Power Chronicles* article, a national joint targeting center would coordinate all-source analysis based upon the JFC's clearly stated operational objectives for unhindered planning and targeting (Christian and Dillard 2000).

This thesis recommends option 3, the creation of a new oversight board, with the following additional recommendations:

1. Develop and implement joint doctrine directing a JMFCB in place of the JTCB to provide the JFC oversight at the operational level for maneuver and fires. A JMFCB will better fuse the warfighting data between the land and air components. Each component will more efficiently support the other when each has a thorough understanding of the other's scheme of maneuver and fires. The JMFCB also provides the JFC and component commanders daily reports on progress and problems associated with achieving the JFC's stated objectives. The board will also help maintain a high-level of battlefield situational awareness for all parties.

2. The JMFCB should be a JFC--or deputy JFC--led board. The JMFCB will produce clearly stated command guidance and priorities for future plans and current operations. It is a macro level oversight board and not a method for prescribing tactics to the component commanders. The emphasis is on coordination and integration of all components and provides a forum for the JFC, JFACC, and JFLCC, through their representatives, to provide the component's own perspective on the operation. The formal

nature of the board and its leadership by either the JFC or the deputy JFC will ensure the appropriate high-level of interest and prevent the appearance of component bias or favoritism by having the JFACC or JFLCC chair the board. The formal board process should encourage the proper level of preparation for an efficient, succinct, and effective meeting.

3. The Joint Staff further study the feasibility of the JMFCB evolving into a Joint Coordination Board, or equivalent, to encompass the full spectrum of missions a JFC must oversee within the theater of operations.

Areas for Further Study

Obviously implementation of such a new organization affects many areas such as doctrine, training, leader development, organizations, materiel, personnel, and facilities. The extent of the impact requires further investigation. Should JP 3-60 include the JMFCB or should it have its own doctrine publication? Should JP3-60 change from a targeting publication to a maneuver and fires publication or is it important to have detailed separate publications for both targeting and maneuver? Should the JTCC evolve into something beyond the JMFCB, such as a Joint Effects Board or a Joint Coordination Board to include such areas as: information operations; intelligence, surveillance, and reconnaissance collection; electronic warfare; psychological operations; civil affairs; and humanitarian operations?

One alternative to the current doctrinal approach was used during Operation Iraqi Freedom during March-April 2003. Recognizing a problem with joint integration, joint planners developed a different approach to coordination and integration during the early buildup in Southwest Asia for a possible war with Iraq. Air Force Major General Daniel

Leaf was appointed as the “Air Component Coordination Element” in the coalition forces land component commander’s headquarters in Kuwait. As such, he was a conduit between the coalition forces land component commander in Kuwait and the coalition forces air component commander, headquartered at Prince Sultan Air Base, Saudi Arabia, for operational level issues and focus. “Never in recent years has such a high-ranking officer been embedded in another military component’s warfighting headquarters, officials believe. Nor is such a high-level liaison position described in military doctrine, despite the years each service has spent crafting detailed tomes [large books] on how to fight wars jointly” (Grossman 2003, 1).

Lieutenant General David McKiernan, the Coalition Forces Land Component Commander for Operation Iraqi Freedom, said, “Through thorough and detailed planning and execution, fires from the air and land components are integrated and focused, creating a powerful synergy to achieve operational objectives. [Leaf and his team] will be crucial to massing fires and leveraging all our capabilities across the spectrum of fires” (Grossman 2003, 1). This unprecedented effort should look at both fires and maneuver and not just on fires or the military may repeat the problems they faced recently in Afghanistan.

Summary

This thesis focused on the crucial area of commander oversight. Identifying potential disconnects in joint planning and liaison is of critical importance in order to ensure the US military is victorious in its endeavors. The action of theater commanders in Korea, Europe, and the Middle East to enhance the existing doctrinal procedures reinforces the conclusion that existing joint publications do not go far enough in defining

oversight process for the JFC. It is important to include these mechanisms, like the JMFCB, in joint doctrine so that forces can deploy anywhere in the world and have the same foundation to build from, instead of facing theater specific techniques.

REFERENCE LIST

1998. *Air campaign planning handbook*. Joint Doctrine Air Campaign Course. CADRE. Maxwell Air Force Base, AL: Air University.
- AFDD 1. 1997. See US Department of the Air Force. 1997.
- AFDD 2-1.3. 1999. See US Department of the Air Force. 1999.
- AFDD 2. 2000. See US Department of the Air Force. 2000.
- AFDD 2-1. 2000a. See US Department of the Air Force 2000a.
- Bently, Christopher F. 2002. Afghanistan: Joint and coalition fire support in operation Anaconda. *Field Artillery*, September/October, 10-14.
- Charlton, James., ed. 2002. *The military quotation book*. New York: Thomas Dunne Books.
- Christian, Mark C., and James E. Dillard. 2002. Why we need a national joint targeting center. *Air and Space Power Chronicles*, January. Article on-line. Available from <http://www.airpower.maxwell.af.mil/airchronicles/cc/Dillard.html>. Internet. Accessed on 14 February 2003.
- Cohen, Eliot A., ed. 1993. *Gulf war air power survey, volume I, planning and command and control*. Washington, DC: U.S. Government Printing Office.
- D'Amico, Robert J. 1999. Joint fires coordination: service competencies and boundary challenges, *Joint Forces Quarterly* (spring): 70-77.
- Echevarria, Antulio J. II. 1999. Fusing airpower and land power in the twenty-first century. *Airpower Journal* XIII, no. 3. (fall): 66-74.
- Flinn, Edward L. 1999. Joint targeting, are joint tactics, techniques and procedures adequate? Strategy Research Project. US Army War College: Carlisle Barrack.
- FM 6-20-10. 1996. See US Department of the Army. 1996.
- FM 100-15. 1996a. See US Department of the Army. 1996a.
- FM 101-5. 1997. See US Department of the Army. 1997.
- FM 100-13. 1999. See US Department of the Army. 1999.
- FM 1, 2001. See US Department of the Army. 2001

FM 3-0. 2001a. See US Department of the Army, 2001a.

Forshee, Charles E. 1997. *A Case for including air power in the 1998 FM 100-5, operations*. Monograph. School of Advanced Military Studies, Ft Leavenworth, KS.

Grant Rebecca. 2002. Anaconda. *Air Force Magazine* 85, no. 9 (September): 61-68.

_____. 2002a. An air war like no other. *Air Force Magazine* 85, no. 11 (November): 30-37.

_____. 2003. The clash about CAS. *Air Force Magazine* 86, no. 1 (January): 54-59.

_____. 2003a. The great escape. *Air Force Magazine* 86, no. 3 (March): 38-44.

Grossman, Elaine M. 2002. Left in the dark for most Anaconda planning, Air Force opens new probe. *Inside the Pentagon*, 3 October: 1-9. Article on-line. Available from <http://bwest.dtic.mil/oct2002/e20021003left.htm>. Internet. Accessed on 3 October 2002.

_____. 2003. Iraq War could feature unprecedented air-land collaboration. *Inside the Pentagon*, 13 February: 1-4. Article on-line. Available from http://ca.dtic.mil/cgi-bin/ebird.cgi?doc_url=/feb2003/s20030213154013.html. Internet. Accessed on 15 February 2003.

Hebert, Adam J. 2002. After leaving USAF out of Anaconda planning, Army general blast air support. *Air Force Magazine* 85, no. 11 (November): 14.

_____. 2002. Joint Coordination Board Concept of Operations Briefing. United States Air Force Europe: December.

_____. 1997. Joint Force Fires Coordinator Study. Fort Monroe, VA: Joint Warfighting Center.

JP 3-56.1. 1994. See US Department of Defense.1994.

JP 5-0. 1995. See US Department of Defense. 1995.

JP 3-09. 1998. See US Department of Defense. 1998.

JP 5-00.2. 1999. See US Department of Defense. 1999.

JP 1. 2000. See US Department of Defense. 2000.

- JP 1-02. 2001. See US Department of Defense. 2001.
- JP 3-0. 2001a. See US Department of Defense. 2001a.
- JP 3-60. 2002. See US Department of Defense. 2002.
- The Joint Warfighting Center (JWC) at Fort Monroe, Virginia, published the *Joint Force Fires Coordinator Study* in 1997.
- Laughbaum, R. Kent. 1999. *Synchronizing airpower and firepower in the deep battle*. CADRE. Maxwell AFB, AL: Air University.
- Lewis, Richard B. H. 1994. JFACC problems associated with battlefield preparation in Desert Storm. *Air Power Journal* VIII, no. 1 (spring): 4-21.
- Mann, Edward C. III. 1995. *Thunder and lighting: Desert Storm and the airpower debates*. Maxwell Air Force Base, AL: Air University Press. 5-9.
- McElroy, Robert H., and Patrecia Slayden Hollis, ed. 2002. Fire support for operation Anaconda. *Field Artillery*, September/October, 5-9.
- Moeller, Michael R. 1995. *The sum of their fears: The relationship between the joint targeting coordination board and the joint force commander*. Maxwell Air Force Base, AL: Air University Press.
- Myers, Gene. 1997. The Army-Air Force doctrinal disputes: symptoms or causes. Aerospace Education Foundation, September. Article on-line. Available from <http://www.aef.org/pub/eaker/jap.html>. Internet. Accessed on 16 November 2002.
- Pivarsky, Carl R., Jr. 1997. Airpower in the context of a dysfunctional joint doctrine. Air War College, Maxwell Air Force Base, AL.
- Quintrall, Mick. 2002. A change-challenge: The fire support coordination "box." *Air and Space Power Journal* (fall): 7-16.
- Reimer, Dennis J., Chief of Staff United States Army, and Ronald R. Fogleman, Chief of Staff United States Air Force. 1996. Joint warfare and the Army-Air Force team. *Joint Forces Quarterly* (spring): 9-15.
- Roberts, Jerry A. 1993. Ocean venture 93 and the joint targeting coordination board *Field Artillery*, October, 20-21.
- Scales, Robert H. 1993. *Certain victory: The US Army in the Gulf War*. Washington DC: Office of the Chief of Staff United States Army.

- Swain, Richard M. 1997. *Lucky war: Third Army in Desert Storm*. Fort Leavenworth, KS: US Army Command and General Staff College.
- US Department of the Air Force. Air Force Doctrine Center. 1997. AFDD 1, *Air Force basic doctrine*. Washington DC: Headquarters, Department of the Air Force.
- _____. 1999. AFDD 2-1.3, *Counterland*. Washington DC: Headquarters, Department of the Air Force.
- _____. 2000. AFDD 2, *Organization and employment of aerospace power*. Washington DC: Headquarters, Department of the Air Force.
- _____. 2000a. AFDD 2-1, *Air warfare*. Washington DC: Headquarters, Department of the Air Force.
- US Department of the Army. n.d. *Army vision 2010*. Washington DC: Headquarters, Department of the Army.
- US Department of the Army. 1996. FM 6-20-10, *Tactics, techniques, and procedures for the targeting process*. Washington DC: Headquarters, Department of the Army.
- _____. 1996a. FM 100-15, *Corps operations*. Washington DC: Headquarters, Department of the Army.
- _____. 1997. FM 101-5, *Staff organization and operations*. Washington DC: Headquarters, Department of the Army.
- _____. 1999. FM 100-13, *Battlefield coordination detachment (BCD)*. Washington DC: Headquarters, Department of the Army.
- _____. 2001. FM 1, *The Army*. Washington DC: Headquarters, Department of the Army.
- _____. 2001a. FM 3-0, *Operations*. Washington DC: Headquarters, Department of the Army.
- US Department of Defense. 1994. Joint Publication 3-56.1, *Command and control for joint air operations*. Washington DC: US Government Printing Office.
- _____. 1995. Joint Publication 5-0, *Doctrine for planning joint operations*. Washington DC: US Government Printing Office.
- _____. 1998. Joint Publication 3-09, *Doctrine for joint fire support*. Washington DC: US Government Printing Office.

- _____. 1999. Joint Publication 5-00.2, *Joint task force planning guidance and procedures*. Washington DC: US Government Printing Office.
- _____. 2000. Joint Publication 1, *Joint warfare of the armed forces of the United States*. Washington DC: US Government Printing Office.
- _____. 2001. Joint Publication 1-02, *Department of defense dictionary of military and associated terms*. Washington DC: US Government Printing Office.
- _____. 2001a. Joint Publication 3-0, *Doctrine for Joint operations*. Washington DC: US Government Printing Office.
- _____. 2002. Joint Publication 3-60, *Joint doctrine for targeting*. Washington DC: US Government Printing Office.
- Winnefeld, James A., and Dana J. Johnson. 1994. *A league of airmen: US air power in the Gulf War*. Santa Monica, CA: Rand.
- Winton, Harold R. 1992. A black hole in the wild blue yonder: The need for a comprehensive theory of airpower. *Air Power History* (winter): 32-42.
- _____. 1996. Partnership and tension: The Army and Air Force between Vietnam and Desert Shield. *Parameters* (spring): 100-119.

INITIAL DISTRIBUTION LIST

Combined Arms Research Library
U.S. Army Command and General Staff College
250 Gibbon Ave.
Fort Leavenworth, KS 66027-2314

Defense Technical Information Center/OCA
825 John J. Kingman Rd., Suite 944
Fort Belvoir, VA 22060-6218

Air University Library
Maxwell Air Force Base
AL 36112

Major Matthew Phillips
Air Force Element
USACGSC
1 Reynolds Ave.
Fort Leavenworth, KS 66027-1352

Dr. David Gray
DAD
USACGSC
1 Reynolds Ave.
Fort Leavenworth, KS 66027-1352

Lieutenant Colonel John Duquette
CTAC
USACGSC
1 Reynolds Ave.
Fort Leavenworth, KS 66027-1352

CERTIFICATION FOR MMAS DISTRIBUTION STATEMENT

1. Certification Date: 6 June 2003

2. Thesis Author: Major David S. Naisbitt

3. Thesis Title: Joint Maneuver and Fires Coordination Board: Does the Joint Targeting Coordination Board Need to Evolve?

4. Thesis Committee Members: _____

Signatures: _____

5. Distribution Statement: See distribution statements A-X on reverse, then circle appropriate distribution statement letter code below:

(A) B C D E F X SEE EXPLANATION OF CODES ON REVERSE

If your thesis does not fit into any of the above categories or is classified, you must coordinate with the classified section at CARL.

6. Justification: Justification is required for any distribution other than described in Distribution Statement A. All or part of a thesis may justify distribution limitation. See limitation justification statements 1-10 on reverse, then list, below, the statement(s) that applies (apply) to your thesis and corresponding chapters/sections and pages. Follow sample format shown below:

EXAMPLE

<u>Limitation Justification Statement</u>	<u>/</u>	<u>Chapter/Section</u>	<u>/</u>	<u>Page(s)</u>
Direct Military Support (10)	/	Chapter 3	/	12
Critical Technology (3)	/	Section 4	/	31
Administrative Operational Use (7)	/	Chapter 2	/	13-32

Fill in limitation justification for your thesis below:

<u>Limitation Justification Statement</u>	<u>/</u>	<u>Chapter/Section</u>	<u>/</u>	<u>Page(s)</u>
_____	/	_____	/	_____
_____	/	_____	/	_____
_____	/	_____	/	_____
_____	/	_____	/	_____
_____	/	_____	/	_____

7. MMAS Thesis Author's Signature: _____

STATEMENT A: Approved for public release; distribution is unlimited. (Documents with this statement may be made available or sold to the general public and foreign nationals).

STATEMENT B: Distribution authorized to U.S. Government agencies only (insert reason and date ON REVERSE OF THIS FORM). Currently used reasons for imposing this statement include the following:

1. Foreign Government Information. Protection of foreign information.
2. Proprietary Information. Protection of proprietary information not owned by the U.S. Government.
3. Critical Technology. Protection and control of critical technology including technical data with potential military application.
4. Test and Evaluation. Protection of test and evaluation of commercial production or military hardware.
5. Contractor Performance Evaluation. Protection of information involving contractor performance evaluation.
6. Premature Dissemination. Protection of information involving systems or hardware from premature dissemination.
7. Administrative/Operational Use. Protection of information restricted to official use or for administrative or operational purposes.
8. Software Documentation. Protection of software documentation - release only in accordance with the provisions of DoD Instruction 7930.2.
9. Specific Authority. Protection of information required by a specific authority.
10. Direct Military Support. To protect export-controlled technical data of such military significance that release for purposes other than direct support of DoD-approved activities may jeopardize a U.S. military advantage.

STATEMENT C: Distribution authorized to U.S. Government agencies and their contractors: (REASON AND DATE). Currently most used reasons are 1, 3, 7, 8, and 9 above.

STATEMENT D: Distribution authorized to DoD and U.S. DoD contractors only; (REASON AND DATE). Currently most reasons are 1, 3, 7, 8, and 9 above.

STATEMENT E: Distribution authorized to DoD only; (REASON AND DATE). Currently most used reasons are 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10.

STATEMENT F: Further dissemination only as directed by (controlling DoD office and date), or higher DoD authority. Used when the DoD originator determines that information is subject to special dissemination limitation specified by paragraph 4-505, DoD 5200.1-R.

STATEMENT X: Distribution authorized to U.S. Government agencies and private individuals of enterprises eligible to obtain export-controlled technical data in accordance with DoD Directive 5230.25; (date). Controlling DoD office is (insert).